#### **Back Pack Considerations**

- ➤ Development of spine continues until 18 years
- ➤ Backpack often are found to weigh upwards of 15% of body weight
- ➤ Loads more than 10% of body weight affect respiration, posture and gait
- ➤ American Academy of Pediatrics says children should never carry more than 10-20% of body weight, others recommend no more than 15%



### What you can do:

Find out if there is a problem:

- Weigh backpacks
- Get students involved in calculating percentage body weight (it's math!)
- Survey students about discomfort

At schools create a partnership among students, parents and teachers to involve and educate all parties

- Brainstorm ways to reduce loads
- Develop backpack safety guidelines

Encourage regular emptying of backpacks



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## THE BURDEN OF BACKPACKS FOR CHILDREN



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Children around the world now carry backpacks to and from school. Too often the relative weight of child backpacks exceed loads that would be allowed for adult workers. Child complaints of back pain or discomfort are increasing and researchers find up to 60% of those under age 18 report experiencing significant back pain. In addition, sports equipment or musical instruments are also carried and lockers have been removed from most schools.



# It's more than a weight problem

Backpacks can also be a hazard when they are:

- Hoisted in and out of vehicles
- Carried on stairs, over curbs or rough terrain or while riding a bicycle
- On the ground (tripping hazard)
- Being put on or taken off
- Swung around (striking others or objects)
- Involved in falls

#### Parent role

The majority of parents have never weighed their child's backpack and do not know what is in the backpacks

Significantly fewer parents of middle school students than elementary school have weighed or checked contents of backpacks

Backpacks of students whose parents did not check contents or weight have been found to be significantly heavier than those who did

# Signs a backpack is too heavy

- 1. Struggling to get the backpack on or off
- 2. Pain when wearing the backpack
- 3. Numbness or tingling
- 4. Red marks
- 5. Changes in the natural curves of the spine

### Student role

Be sure to wear backpack with shoulder straps over both shoulders

Empty backpack weekly and do not carry items that are not needed

Store backpacks safely

Do not swing or hit others with backpack